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APPLICATION NO.	ı	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,098		12/16/2003	Steven Hong	AP3051-5ZF1BA08	3627
46828	7590	08/10/2005		EXAMINER	
STEVEN H	IONG		RODRIGUEZ, RUTH C		
235 CHUNC	G-HO BC	OX 8-24			
TAIPEI HSI	EN, 23	35	ART UNIT	PAPER NUMBER	
TAIWAN				3677	
				DATE MAIL ED: 08/10/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		A (:				
	Application No.	Applicant(s)				
Office Action Summan	10/736,098	HONG, STEVEN				
Office Action Summary	Examiner	Art Unit				
	Ruth C. Rodriguez	3677				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 27 M	lay 2005.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1 and 2 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.						
7) Claim(s) is/are objected to.	a ala alla a sa a sina mand					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>16 December 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the	= : :					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	ACTION OF TOM PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate Patent Application (PTO-152)				
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	6) Other:	assum (ppilousion (i 10-104)				
S. Patent and Trademark Office						

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crook, Jr. (US 4,174,132) in view of Criswell (US 2,493,282).

Crook discloses a locking structure combining a hook (10) and a hanging ring (11). The locking structure comprises a hook member (11), a hanging ring (11) and a screw nut (23). The hook member has a cylindrical locking section extending from a top thereof (Figs. 1 and 2). The locking section has threads at an outer surface (Figs. 1 and 2). The hanging ring includes a ring coupler (22) mounted onto the locking section. The locking section of the hook member is inserted through the ring coupler of the hanging ring and connecting the screw nut (Fig. 1). The screw nut is twisted and moved along the locking section until the cylindrical locking section is secured (Fig. 1). Crook fails to disclose that the locking section has a through hole, the screw nut has radially distributed blocks and the use of a spring lock pin. However, Criswell teaches a locking structure combines a hook (H) and a hanging ring (B,F). The locking structure comprises a hook member (10), a hanging ring (B,F), a screw nut (25) and a spring lock

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pin (26). The hook member has a cylindrical locking section (14) extending from a top thereof. The locking section includes a through hole that runs radially through a crosssection of the locking section (Fig. 1). The hanging ring includes a ring coupler (b) mounted onto the locking section. The screw nut has a plurality of radially distributed blocks formed on an upper end thereof and spaces between adjacent blocks defining a plurality of radially distributed retaining slots (C.2, L. 31-40). The spring lock pin is inserted into the through hole of the locking section (Fig. 1). The locking section of the hook member is inserted through the ring coupler of the hanging ring and connecting the screw nut (Fig. 1). The screw nut is twisted and moved along the locking section to align two opposite retaining slots thereon with the through hole of the locking section (Fig. 1). The spring lock pin is inserted through the through hole and the two opposite retaining slots so as to lock the hook member and the hanging ring together (Fig. 1). Self-gravity of the hook member will cause the screw nut to move downward with respect to the ring coupler of the hanging ring so that the spring lock pin resists against an upper horizontal face of the screw nut and thus secured, without a riveting mechanism in conventional locking structures for combing a hook and a hanging ring process (Fig. 1). This securing system allows only rotational movement of the hook with respect to the hanging ring but prevents accidental disengagement of the hook with respect to the hanging ring (C. 1, L. 44-55). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the locking section having a through hole, the screw nut having radially distributed blocks and the use of a spring lock pin to secure the locking section to the with respect to the

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screw nut as taught by Criswell in the hook of Crook. Doing so, allows only rotational movement of the hook with respect to the hanging ring but prevents accidental disengagement of the hook with respect to the hanging ring.

Criswell also teaches that the spring lock pin has a length equal to a diameter of the radially distributed blocks so that the spring lock pin is not likely to collide with a foreign object and falls off the screw nut (Fig. 1).

### Response to Arguments

3. Applicant's arguments with respect to claims 1 and 2 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cousins (US 1,394,068), Fermier et al. (US 2,124,692), Criswell (US 2,493,282), Behnke (US 3,584,909), Engh (US 3,912,318), Powell (US 3,968,987), Springer et al. (US 4,549,829) and Gagnon (US 6,082,793) are cited to show state of the art with respect to a locking structure that combines a hook member and a hanging ring with some of the features mentioned in the current application.

Crook (US 4,174,132) and Garrett (US 5,381,650) are cited to show state of the art with respect to hooks having a locking section with threads on the outer surface.

Crook also discloses that the inner wall of the blocks being threaded.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez Patent Examiner Art Unit 3677

RGR rcr August 8, 2005

> POBERT J. SANDY PRIMARY EXAMINER